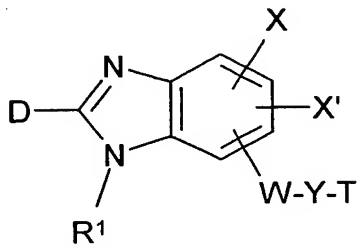
Patent Claims

1. Compounds of the formula I



I

in which

D is an aromatic carbocyclic or heterocyclic ring having from 0 to 4 N, O and/or S atoms which is unsubstituted or monosubstituted or polysubstituted by Hal, A, OR^2, $N(R^2)_2$, NO_2, CN, $COOR^2$ or $CON(R^2)_2$,

X and X' are each, independently of one another, H, Hal, A, OR^2, $N(R^2)_2$, NO_2, CN, $COOR^2$ or $CON(R^2)_2$,

R^1 is H or A,

R^2 is H, A, $-[C(R^1)_2]_n$-Ar', $-[C(R^1)_2]_n$-Het', $-[C(R^1)_2]_n$-cycloalkyl, $-[C(R^1)_2]_n-N(R^1)_2$ or $-[C(R^1)_2]_n-OR^1$,

W is $-[C(R^2)_2]_nCONR^2[C(R^2)_2]_n-$, $-[C(R^2)_2]_nNR^2CO[C(R^2)_2]_n-$, $-[C(R^2)_2]_nO[C(R^2)_2]_n-$, $-[C(R^2)_2]_nNR^2[C(R^2)_2]_n-$, $-[C(R^2)_2]_nO[C(R^2)_2]_nCONR^2[C(R^2)_2]_n-$, $-[C(R^2)_2]_nNR^2[C(R^2)_2]_nCONR^2[C(R^2)_2]_n-$, $-[C(R^2)_2]_nNR^2COO[C(R^2)_2]_n-$ or $-[C(R^2)_2]_nS(O)_m[C(R^2)_2]_nCONR^2[C(R^2)_2]_n-$,

Y is alkylene, cycloalkylene, Het-diyl or Ar-diyl,

T is a monocyclic or bicyclic, saturated, unsaturated or aromatic carbocyclic or heterocyclic ring having from 0 to 4 N, O and/or S atoms which is unsubstituted or monosubstituted, disubstituted or trisubstituted by =O, =S,

=NR^2, =N-CN, =N-NO_2, =NOR^2, =$NCOR^2$, =$NCOOR^2$, =$NOCOR^2$, R^2, Hal, -$[C(R^1)_2]_n$-Ar, -$[C(R^1)_2]_n$-Het, -$[C(R^1)_2]_n$-cycloalkyl, OR^2, $N(R^2)_2$, NO_2, CN, $COOR^2$, $CON(R^2)_2$, NR^2COA, NR^2SO_2A, COR^2 and/or $S(O)_mA$,

A is unbranched or branched alkyl having 1-10 carbon atoms, in which one or two CH_2 groups may be replaced by O or S atoms and/or by -CH=CH- groups and/or in addition 1-7 H atoms may be replaced by F,

Ar is phenyl, naphthyl or biphenyl, each of which is unsubstituted or monosubstituted, disubstituted or trisubstituted by Hal, A, OR^2, $N(R^2)_2$, NO_2, CN, $COOR^2$, $CON(R^2)_2$, NR^2COA, $NR^2CON(R^2)_2$, NR^2SO_2A, COR^2, $SO_2N(R^2)_2$, $S(O)_mA$, -$[C(R^1)_2]_n$-$COOR^2$ or -O-$[C(R^1)_2]_o$-$COOR^2$,

Ar' is phenyl which is unsubstituted or monosubstituted, disubstituted or trisubstituted by Hal, A, OR^1, $N(R^1)_2$, NO_2, CN, $COOR^1$, $CON(R^1)_2$, NR^1COA, NR^1SO_2A, COR^1, $SO_2N(R^1)_2$, $S(O)_mA$, -$[C(R^1)_2]_n$-$COOR^1$ or -O-$[C(R^1)_2]_o$-$COOR^1$,

Het is a monocyclic or bicyclic, saturated, unsaturated or aromatic heterocyclic ring having from 1 to 4 N, O and/or S atoms which is unsubstituted or monosubstituted, disubstituted or trisubstituted by carbonyl oxygen, =S, =$N(R^1)_2$, Hal, A, -$[C(R^1)_2]_n$-Ar, -$[C(R^1)_2]_n$-Het', -$[C(R^1)_2]_n$-cycloalkyl, -$[C(R^1)_2]_n$-OR^2, -$[C(R^1)_2]_n$-$N(R^2)_2$, NO_2, CN, -$[C(R^1)_2]_n$-$COOR^2$, -$[C(R^1)_2]_n$-$CON(R^2)_2$, -$[C(R^1)_2]_n$-NR^2COA, $NR^2CON(R^2)_2$, -$[C(R^1)_2]_n$-NR^2SO_2A, COR^2, $SO_2N(R^2)_2$ and/or $S(O)_mA$,

Het' is a monocyclic or bicyclic, saturated, unsaturated or aromatic heterocyclic ring having from 1 to 4 N, O and/or S

atoms which is unsubstituted or monosubstituted or disubstituted by carbonyl oxygen, =S, $=N(R^1)_2$, Hal, A, OR^1, $N(R^1)_2$, NO_2, CN, $COOR^1$, $CON(R^1)_2$, NR^1COA, NR^1SO_2A, COR^1, $SO_2N(R^1)_2$ and/or $S(O)_mA$,

Hal is F, Cl, Br or I,

m is 0, 1 or 2,

n is 0, 1 or 2,

o is 1, 2 or 3,

and pharmaceutically usable derivatives, solvates and stereoisomers thereof, including mixtures thereof in all ratios.

2. Compounds of the formula I according to Claim 1, in which

D is an aromatic carbocyclic or heterocyclic ring having from 0 to 4 N, O and/or S atoms which is unsubstituted or monosubstituted or polysubstituted by Hal, A, OR^1, $N(R^1)_2$, NO_2, CN, $COOR^1$ or $CON(R^1)_2$,

and pharmaceutically usable derivatives, solvates and stereoisomers thereof, including mixtures thereof in all ratios.

3. Compounds of the formula I according to Claim 1 or 2, in which

D is phenyl, pyrrolyl, furyl, thiophenyl, pyridinyl, pyrimidinyl, pyridazinyl, pyrazinyl, pyrazolyl, imidazolyl, oxazolyl, isoxazolyl, thiazolyl, isothiazolyl, triazolyl, tetrazolyl or triazinyl, each of which is unsubstituted or monosubstituted or polysubstituted by Hal, A, OR^2, $N(R^2)_2$, NO_2, CN, $COOR^2$ or $CON(R^2)_2$,

and pharmaceutically usable derivatives, solvates and stereoisomers thereof, including mixtures thereof in all ratios.

4. Compounds of the formula I according to one or more of Claims 1-3, in which

D is phenyl, pyrrolyl, furyl, thiophenyl, pyridinyl, pyrimidinyl, pyridazinyl, pyrazinyl, pyrazolyl, imidazolyl, oxazolyl, isoxazolyl, thiazolyl, isothiazolyl, triazolyl, tetrazolyl or triazinyl, each of which is unsubstituted or monosubstituted or polysubstituted by Hal, A, OR^1, $N(R^1)_2$, NO_2, CN, $COOR^1$ or $CON(R^1)_2$,

and pharmaceutically usable derivatives, solvates and stereoisomers thereof, including mixtures thereof in all ratios.

5. Compounds of the formula I according to one or more of Claims 1-4, in which

D is an aromatic carbocyclic or heterocyclic ring having from 0 to 4 N, O and/or S atoms which is monosubstituted or polysubstituted by Hal,

and pharmaceutically usable derivatives, solvates and stereoisomers thereof, including mixtures thereof in all ratios.

6. Compounds of the formula I according to one or more of Claims 1-5, in which

D is phenyl, pyrrolyl, furyl, thiophenyl, pyridinyl, pyrimidinyl, pyridazinyl, pyrazinyl, pyrazolyl, imidazolyl, oxazolyl, isoxazolyl, thiazolyl, isothiazolyl or triazinyl, each of which is monosubstituted or polysubstituted by Hal,

and pharmaceutically usable derivatives, solvates and stereoisomers thereof, including mixtures thereof in all ratios.

7. Compounds of the formula I according to one or more of Claims 1-6, in which

D is phenyl, thiophenyl or pyridinyl, each of which is monosubstituted or polysubstituted by Hal,

and pharmaceutically usable derivatives, solvates and stereoisomers thereof, including mixtures thereof in all ratios.

8. Compounds of the formula I according to one or more of Claims 1-7, in which

X and X' are H,

and pharmaceutically usable derivatives, solvates and stereoisomers thereof, including mixtures thereof in all ratios.

9. Compounds of the formula I according to one or more of Claims 1-8, in which

R^2 is H, A or $-[C(R^1)_2]_n-Ar'$,

and pharmaceutically usable derivatives, solvates and stereoisomers thereof, including mixtures thereof in all ratios.

10. Compounds of the formula I according to one or more of Claims 1-9, in which

Y is phenylene which is unsubstituted or monosubstituted or disubstituted by A, Br, Cl or F,

and pharmaceutically usable derivatives, solvates and stereoisomers thereof, including mixtures thereof in all ratios.

11. Compounds of the formula I according to one or more of Claims 1-10, in which

Ar is phenyl, naphthyl or biphenyl, each of which is unsubstituted or monosubstituted, disubstituted or trisubstituted by Hal, A, OR^1, $N(R^1)_2$, NO_2, CN, $COOR^1$,

$CON(R^1)_2$, NR^1COA, $NR^1CON(R^1)_2$, NR^1SO_2A, COR^1, $SO_2N(R^1)_2$, $S(O)_mA$, $-[C(R^1)_2]_n-COOR^1$ or $-O-[C(R^1)_2]_o-COOR^1$, and pharmaceutically usable derivatives, solvates and stereoisomers thereof, including mixtures thereof in all ratios.

12. Compounds of the formula I according to one or more of Claims 1-11, in which

T is a monocyclic saturated or unsaturated carbocyclic or heterocyclic ring having 1 or 2 N and/or O atoms which is unsubstituted or monosubstituted or disubstituted by =O, =S, $=NR^1$, $=NOR^1$, =N-CN, $=N-NO_2$, $=NCOR^1$, $=NCOOR^1$, $=NOCOR^1$, A, Hal and/or $S(O)_mA$,

and pharmaceutically usable derivatives, solvates and stereoisomers thereof, including mixtures thereof in all ratios.

13. Compounds of the formula I according to one or more of Claims 1-12, in which

T is a monocyclic saturated or unsaturated heterocyclic ring having 1 or 2 N and/or O atoms which is unsubstituted or monosubstituted or disubstituted by =O, =S, $=NR^1$ or $=NOR^1$,

and pharmaceutically usable derivatives, solvates and stereoisomers thereof, including mixtures thereof in all ratios.

14. Compounds of the formula I according to one or more of Claims 1-13, in which

T is piperidin-1-yl, pyrrolidin-1-yl, pyridyl, morpholin-4-yl, piperazin-1-yl, pyrazin-1-yl, 1,3-oxazolidin-3-yl, 2*H*-pyridazin-2-yl, azepan-1-yl, 2-azabicyclo[2.2.2]octan-2-yl, pyrazol-2-yl or 1,2-dihydropyrazol-2-yl, each of which is unsubstituted or

monosubstituted or disubstituted by =O, =NR^1, =S, =NOR^1, A, Hal and/or $S(O)_mA$,

or phenyl, which may be monosubstituted, disubstituted or trisubstituted by A, Hal and/or $S(O)_mA$,

and pharmaceutically usable derivatives, solvates and stereoisomers thereof, including mixtures thereof in all ratios.

15. Compounds of the formula I according to one or more of Claims 1-14, in which

T is 2-oxopiperidin-1-yl, 2-oxopyrrolidin-1-yl, 2-oxo-1*H*-pyridin-1-yl, 3-oxomorpholin-4-yl, 4-oxo-1*H*-pyridin-1-yl, 2,6-dioxo-piperidin-1-yl, 2-oxopiperazin-1-yl, 2-oxopyrazin-1-yl, 2,6-dioxopiperazin-1-yl, 2,5-dioxopyrrolidin-1-yl, 2-oxo-1,3-oxazolidin-3-yl, 3-oxo-2*H*-pyridazin-2-yl, 2-caprolactam-1-yl (= 2-oxoazepan-1-yl), 2-hydroxy-6-oxopiperazin-1-yl, 2-azabicyclo[2.2.2]octan-3-on-2-yl, 2-methoxy-6-oxo-piperazin-1-yl, 5,6-dihydro-1*H*-pyrimidin-2-oxo-1-yl, 2-iminopiperidin-1-yl, 2-iminopyrrolidin-1-yl, 2-imino-1*H*-pyridin-1-yl, 3-iminomorpholin-4-yl, 4-imino-1*H*-pyridin-1-yl, 2,6-diiminopiperidin-1-yl, 2-iminopiperazin-1-yl, 2,6-diiminopiperazin-1-yl, 2,5-diiminopyrrolidin-1-yl, 2-imino-1,3-oxazolidin-3-yl, 3-imino-2*H*-pyridazin-2-yl, 2-iminoazepan-1-yl, 2-hydroxy-6-iminopiperazin-1-yl, 2-methoxy-6-imino-piperazin-1-yl or pyridyl,

and the corresponding hydroxyimino, alkoxyimino and thioxo derivatives,

or phenyl, which may be monosubstituted, disubstituted or trisubstituted by A, Hal and/or $S(O)_mA$,

and pharmaceutically usable derivatives, solvates and stereoisomers thereof, including mixtures thereof in all ratios.

16. Compounds of the formula I according to one or more of Claims 1-15, in which

T is 2-oxopiperidin-1-yl, 2-oxopyrrolidin-1-yl, 2-oxo-1*H*-pyridin-1-yl, 3-oxomorpholin-4-yl, 4-oxo-1*H*-pyridin-1-yl, 2,6-dioxopiperidin-1-yl, 2-oxopiperazin-1-yl, 2,6-dioxopiperazin-1-yl, 2-oxopyrazin-1-yl, 2,5-dioxopyrrolidin-1-yl, 2-oxo-1,3-oxazolidin-3-yl, 3-oxo-2*H*-pyridazin-2-yl, 2-caprolactam-1-yl (= 2-oxoazepan-1-yl), 2-hydroxy-6-oxopiperazin-1-yl, 2-azabicyclo[2.2.2]octan-3-on-2-yl, 2-methoxy-6-oxo-piperazin-1-yl, 5,6-dihydro-1*H*-pyrimidin-2-oxo-1-yl, 2-iminopiperidin-1-yl, 2-iminopyrrolidin-1-yl or pyridyl, or phenyl, which may be monosubstituted, disubstituted or trisubstituted by A, Hal and/or $S(O)_mA$,

and pharmaceutically usable derivatives, solvates and stereoisomers thereof, including mixtures thereof in all ratios.

17. Compounds of the formula I according to one or more of Claims 1-16, in which

Ar is phenyl which is unsubstituted or monosubstituted or disubstituted by Hal or A,

and pharmaceutically usable derivatives, solvates and stereoisomers thereof, including mixtures thereof in all ratios.

18. Compounds of the formula I according to one or more of Claims 1-17, in which

Het-diyl is furandiyl, thiophenediyl, pyrrolediyl, imidazolediyl, pyrazolediyl, oxazolediyl, isoxazolediyl, thiazolediyl, isothiazolediyl, pyridinediyl, pyrimidinediyl, pyrroli-

dinediyl or piperidinediyl, each of which is unsubstituted or monosubstituted or disubstituted by $R^{2'}$,

$R^{2'}$ is H or alkyl having 1, 2, 3, 4, 5 or 6 carbon atoms,

and pharmaceutically usable derivatives, solvates and stereoisomers thereof, including mixtures thereof in all ratios.

19. Compounds of the formula I according to one or more of Claims 1-18, in which

D is an aromatic carbocyclic or heterocyclic ring having from 0 to 4 N, O and/or S atoms which is unsubstituted or monosubstituted or polysubstituted by Hal, A, OR^1, $N(R^1)_2$, NO_2, CN, $COOR^1$ or $CON(R^1)_2$,

X and X' are H,

W is $-[C(R^2)_2]_nCONR^2[C(R^2)_2]_n-$, $-[C(R^2)_2]_nNR^2CO[C(R^2)_2]_n-$, $-[C(R^2)_2]_nO[C(R^2)_2]_n-$, $-[C(R^2)_2]_nNR^2[C(R^2)_2]_n-$, $-[C(R^2)_2]_nO[C(R^2)_2]_nCONR^2[C(R^2)_2]_n-$, $-[C(R^2)_2]_nNR^2[C(R^2)_2]_nCONR^2[C(R^2)_2]_n-$, $-[C(R^2)_2]_nNR^2COO[C(R^2)_2]_n-$ or $-[C(R^2)_2]_nS(O)_m[C(R^2)_2]_nCONR^2[C(R^2)_2]_n-$,

R^2 is H, A or $-[C(R^1)_2]_n-Ar'$,

Y is alkylene, cycloalkylene, Het-diyl or Ar-diyl,

Ar-diyl is phenylene or biphenylene, each of which is unsubstituted or monosubstituted or disubstituted by $R^{2'}$,

Het-diyl is furandiyl, thiophenediyl, pyrrolediyl, imidazolediyl, pyrazolediyl, oxazolediyl, isoxazolediyl, thiazolediyl, isothiazolediyl, pyridinediyl, pyrimidinediyl, pyrrolidinediyl or piperidinediyl, each of which is unsubstituted or monosubstituted or disubstituted by $R^{2'}$,

$R^{2'}$ is H or alkyl having 1, 2, 3, 4, 5 or 6 carbon atoms,

Ar' is phenyl,

T is a monocyclic saturated or unsaturated carbocyclic or heterocyclic ring having 1 or 2 N and/or O atoms which is unsubstituted or monosubstituted or disubstituted by =O, =S, =NR^1, =NOR^1, =N-CN, =$N-NO_2$, =$NCOR^1$, =$NCOOR^1$, =$NOCOR^1$, A, Hal and/or $S(O)_mA$,

R^1 is H or A,

A is unbranched or branched alkyl having 1-10 carbon atoms, and 1-7 H atoms may be replaced by F,

and pharmaceutically usable derivatives, solvates and stereoisomers thereof, including mixtures thereof in all ratios.

20. Compounds of the formula I according to one or more of Claims 1-19, in which

D is phenyl, pyrrolyl, furyl, thiophenyl, pyridinyl, pyrimidinyl, pyridazinyl, pyrazinyl, pyrazolyl, imidazolyl, oxazolyl, isoxazolyl, thiazolyl, isothiazolyl or triazinyl, each of which is monosubstituted or polysubstituted by Hal,

X and X' are H,

W is $-[C(R^2)_2]_nCONR^2[C(R^2)_2]_n-$, $-[C(R^2)_2]_nNR^2CO[C(R^2)_2]_n-$, $-[C(R^2)_2]_nO[C(R^2)_2]_n-$, $-[C(R^2)_2]_nNR^2[C(R^2)_2]_n-$, $-[C(R^2)_2]_nO[C(R^2)_2]_nCONR^2[C(R^2)_2]_n-$, $-[C(R^2)_2]_nNR^2[C(R^2)_2]_nCONR^2[C(R^2)_2]_n-$, $-[C(R^2)_2]_nNR^2COO[C(R^2)_2]_n-$ or $-[C(R^2)_2]_nS(O)_m[C(R^2)_2]_nCONR^2[C(R^2)_2]_n-$,

R^2 is H, A or $-[C(R^1)_2]_n-Ar'$,

Ar' is phenyl,

Y is phenylene or piperidinediyl, each of which is unsubstituted or monosubstituted or disubstituted by A, Br, Cl or F,

T is a monocyclic saturated or unsaturated carbocyclic or heterocyclic ring having 1 or 2 N and/or O atoms which is unsubstituted or monosubstituted or disubstituted by =O, =S, =NR^1, =NOR^1, =N-CN, =$N-NO_2$, =$NCOR^1$, =$NCOOR^1$, =$NOCOR^1$, A, Hal and/or $S(O)_mA$,

R^1 is H or A,

A is unbranched or branched alkyl having 1-10 carbon atoms, and 1-7 H atoms may be replaced by F,

and pharmaceutically usable derivatives, solvates and stereoisomers thereof, including mixtures thereof in all ratios.

21. Compounds of the formula I according to one or more of Claims 1-20, in which

D is phenyl, pyrrolyl, furyl, thiophenyl, pyridinyl, pyrimidinyl, pyridazinyl, pyrazinyl, pyrazolyl, imidazolyl, oxazolyl, isoxazolyl, thiazolyl, isothiazolyl or triazinyl, each of which is monosubstituted or polysubstituted by Hal,

X and X' are H,

W is $-[C(R^2)_2]_nCONR^2[C(R^2)_2]_n-$, $-[C(R^2)_2]_nNR^2CO[C(R^2)_2]_n-$, $-[C(R^2)_2]_nO[C(R^2)_2]_n-$, $-[C(R^2)_2]_nNR^2[C(R^2)_2]_n-$, $-[C(R^2)_2]_nO[C(R^2)_2]_nCONR^2[C(R^2)_2]_n-$, $-[C(R^2)_2]_nNR^2[C(R^2)_2]_nCONR^2[C(R^2)_2]_n-$, $-[C(R^2)_2]_nNR^2COO[C(R^2)_2]_n-$ or $-[C(R^2)_2]_nS(O)_m[C(R^2)_2]_nCONR^2[C(R^2)_2]_n-$,

R^2 is H, A or $-[C(R^1)_2]_n-Ar'$,

Ar' is phenyl,

Y is phenylene or piperidinediyl, each of which is unsubstituted or monosubstituted or disubstituted by A, Br, Cl or F,

T is 2-oxopiperidin-1-yl, 2-oxopyrrolidin-1-yl, 2-oxo-1*H*-pyridin-1-yl, 3-oxomorpholin-4-yl, 4-oxo-1*H*-pyridin-1-yl, 2,6-dioxopiperidin-1-yl, 2-oxopiperazin-1-yl, 2,6-dioxopiperazin-1-yl, 2-oxopyrazin-1-yl, 2,5-dioxo-pyrrolidin-1-yl, 2-oxo-1,3-oxazolidin-3-yl, 3-oxo-2*H*-pyridazin-2-yl, 2-caprolactam-1-yl (= 2-oxoazepan-1-yl), 2-hydroxy-6-oxopiperazin-1-yl, 2-azabicyclo[2.2.2]octan-3-on-2-yl, 2-methoxy-6-oxopiperazin-1-yl, 5,6-dihydro-1*H*-pyrimidin-2-oxo-1-yl, 2-iminopiperidin-1-yl, 2-iminopyrrolidin-1-yl or pyridyl, or phenyl, which may be monosubstituted, disubstituted or trisubstituted by A, Hal and/or $S(O)_mA$,

R^1 is H or A,

A is unbranched or branched alkyl having 1-10 carbon atoms, and 1-7 H atoms may be replaced by F,

and pharmaceutically usable derivatives, solvates and stereoisomers thereof, including mixtures thereof in all ratios.

22. Compounds of the formula I according to one or more of Claims 1-21, in which

D is phenyl, pyrrolyl, furyl, thiophenyl, pyridinyl, pyrimidinyl, pyridazinyl, pyrazinyl, pyrazolyl, imidazolyl, oxazolyl, isoxazolyl, thiazolyl, isothiazolyl or triazinyl, each of which is monosubstituted or polysubstituted by Hal,

X and X' are H,

W is $-[C(R^2)_2]_nCONR^2[C(R^2)_2]_n-$ or $-[C(R^2)_2]_nS(O)_m[C(R^2)_2]_nCONR^2[C(R^2)_2]_n-$,

R^2 is H, A or $-[C(R^1)_2]_n-Ar'$,

Ar' is phenyl,

Y is phenylene or piperidinediyl, each of which is unsubstituted or monosubstituted or disubstituted by A, Br, Cl or F,

T is pyridyl,

R^1 is H or A,

A is unbranched or branched alkyl having 1-10 carbon atoms, and 1-7 H atoms may be replaced by F,

and pharmaceutically usable derivatives, solvates and stereoisomers thereof, including mixtures thereof in all ratios.

23. Compounds of the formula I according to one or more of Claims 1-22, in which

T is a monocyclic saturated or unsaturated heterocyclic ring having 1 or 2 N and/or O atoms which is monosubstituted or disubstituted by =O, =S, $=NR^1$ or $=NOR^1$,

and pharmaceutically usable derivatives, solvates and stereoisomers thereof, including mixtures thereof in all ratios.

24. Compounds of the formula I according to one or more of Claims 1-23, in which

T is piperidin-1-yl, pyrrolidin-1-yl, pyridyl, morpholin-4-yl, piperazin-1-yl, pyrazin-1-yl, 1,3-oxazolidin-3-yl, 2*H*-pyridazin-2-yl, azepan-1-yl, 2-azabicyclo[2.2.2]octan-2-yl, pyrazol-2-yl or 1,2-dihydropyrazol-2-yl, each of which is monosubstituted or disubstituted by =O, $=NR^1$, =S or $=NOR^1$,

and pharmaceutically usable derivatives, solvates and stereoisomers thereof, including mixtures thereof in all ratios.

25. Compounds of the formula I according to one or more of Claims 1-24, in which

T is 2-oxopiperidin-1-yl, 2-oxopyrrolidin-1-yl, 2-oxo-1*H*-pyridin-1-yl, 3-oxomorpholin-4-yl, 4-oxo-1*H*-pyridin-1-yl, 2,6-dioxopiperidin-1-yl, 2-oxopiperazin-1-yl, 2-oxopyrazin-1-yl, 2,6-dioxopiperazin-1-yl, 2,5-dioxopyrrolidin-1-yl, 2-oxo-1,3-oxazolidin-3-yl, 3-oxo-2*H*-pyridazin-2-yl, 2-caprolactam-1-yl (= 2-oxoazepan-1-yl), 2-hydroxy-6-oxopiperazin-1-yl, 2-azabicyclo[2.2.2]octan-3-on-2-yl, 2-methoxy-6-oxopiperazin-1-yl, 5,6-dihydro-1*H*-pyrimidin-2-oxo-1-yl, 2-iminopiperidin-1-yl, 2-iminopyrrolidin-1-yl, 2-imino-1*H*-pyridin-1-yl, 3-iminomorpholin-4-yl, 4-imino-1*H*-pyridin-1-yl, 2,6-diiminopiperidin-1-yl, 2-iminopiperazin-1-yl, 2,6-diimino-piperazin-1-yl, 2,5-diiminopyrrolidin-1-yl, 2-imino-1,3-oxazolidin-3-yl, 3-imino-2*H*-pyridazin-2-yl, 2-iminoazepan-1-yl, 2-hydroxy-6-iminopiperazin-1-yl or 2-methoxy-6-imino-piperazin-1-yl,
and the corresponding hydroxyimino, alkoxyimino and thioxo derivatives,

and pharmaceutically usable derivatives, solvates and stereoisomers thereof, including mixtures thereof in all ratios.

26. Compounds of the formula I according to one or more of Claims 1-25, in which

T is 2-oxopiperidin-1-yl, 2-oxopyrrolidin-1-yl, 2-oxo-1*H*-pyridin-1-yl, 3-oxomorpholin-4-yl, 4-oxo-1*H*-pyridin-1-yl, 2,6-dioxopiperidin-1-yl, 2-oxopiperazin-1-yl, 2,6-dioxopiperazin-1-yl, 2-oxopyrazin-1-yl, 2,5-dioxopyrrolidin-1-yl, 2-oxo-1,3-oxazolidin-3-yl, 3-oxo-2*H*-pyridazin-2-yl, 2-caprolactam-1-yl (= 2-oxoazepan-1-yl), 2-hydroxy-6-oxopiperazin-1-yl, 2-azabicyclo[2.2.2]octan-3-on-2-yl, 2-methoxy-6-oxo-

piperazin-1-yl, 5,6-dihydro-1*H*-pyrimidin-2-oxo-1-yl, 2-iminopiperidin-1-yl or 2-iminopyrrolidin-1-yl,

and pharmaceutically usable derivatives, solvates and stereoisomers thereof, including mixtures thereof in all ratios.

27. Compounds of the formula I according to one or more of Claims 1-26, in which

D	is an aromatic carbocyclic or heterocyclic ring having from 0 to 4 N, O and/or S atoms which is unsubstituted or monosubstituted or polysubstituted by Hal, A, OR^1, $N(R^1)_2$, NO_2, CN, $COOR^1$ or $CON(R^1)_2$,
X and X'	are H,
W	is $-[C(R^2)_2]_nCONR^2[C(R^2)_2]_n-$, $-[C(R^2)_2]_nNR^2CO[C(R^2)_2]_n-$, $-[C(R^2)_2]_nO[C(R^2)_2]_n-$, $-[C(R^2)_2]_nNR^2[C(R^2)_2]_n-$, $-[C(R^2)_2]_nO[C(R^2)_2]_nCONR^2[C(R^2)_2]_n-$, $-[C(R^2)_2]_nNR^2[C(R^2)_2]_nCONR^2[C(R^2)_2]_n-$, $-[C(R^2)_2]_nNR^2COO[C(R^2)_2]_n-$ or $-[C(R^2)_2]_nS(O)_m[C(R^2)_2]_nCONR^2[C(R^2)_2]_n-$,
R^2	is H, A or $-[C(R^1)_2]_n-Ar'$,
Y	is alkylene, cycloalkylene, Het-diyl or Ar-diyl,
Ar-diyl	is phenylene or biphenylene, each of which is unsubstituted or monosubstituted or disubstituted by $R^{2'}$,
Het-diyl	is furandiyl, thiophenediyl, pyrroldiyl, imidazoldiyl, pyrazoldiyl, oxazoldiyl, isoxazoldiyl, thiazoldiyl, isothiazoldiyl, pyridinediyl, pyrimidinediyl, pyrrolidinediyl or piperidinediyl, each of which is unsubstituted or monosubstituted or disubstituted by $R^{2'}$,
$R^{2'}$	is H or alkyl having 1, 2, 3, 4, 5 or 6 carbon atoms,
Ar'	is phenyl,

T is a monocyclic saturated or unsaturated carbocyclic or heterocyclic ring having 1 or 2 N and/or O atoms which is monosubstituted or disubstituted by =O, =S, =NR^1, =NOR^1, =N-CN, =N-NO_2, =$NCOR^1$, =$NCOOR^1$ or =$NOCOR^1$,

R^1 is H or A,

A is unbranched or branched alkyl having 1-10 carbon atoms, and 1-7 H atoms may be replaced by F,

and pharmaceutically usable derivatives, solvates and stereoisomers thereof, including mixtures thereof in all ratios.

28. Compounds of the formula I according to one or more of Claims 1-27, in which

D is phenyl, pyrrolyl, furyl, thiophenyl, pyridinyl, pyrimidinyl, pyridazinyl, pyrazinyl, pyrazolyl, imidazolyl, oxazolyl, isoxazolyl, thiazolyl, isothiazolyl or triazinyl, each of which is monosubstituted or polysubstituted by Hal,

X and X' are H,

W is $-[C(R^2)_2]_nCONR^2[C(R^2)_2]_n-$, $-[C(R^2)_2]_nNR^2CO[C(R^2)_2]_n-$, $-[C(R^2)_2]_nO[C(R^2)_2]_n-$, $-[C(R^2)_2]_nNR^2[C(R^2)_2]_n-$, $-[C(R^2)_2]_nO[C(R^2)_2]_nCONR^2[C(R^2)_2]_n-$, $-[C(R^2)_2]_nNR^2[C(R^2)_2]_nCONR^2[C(R^2)_2]_n-$, $-[C(R^2)_2]_nNR^2COO[C(R^2)_2]_n-$ or $-[C(R^2)_2]_nS(O)_m[C(R^2)_2]_nCONR^2[C(R^2)_2]_n-$,

R^2 is H, A or $-[C(R^1)_2]_n-Ar'$,

Ar' is phenyl,

Y is phenylene or piperidinediyl, each of which is unsubstituted or monosubstituted or disubstituted by A, Br, Cl or F,

T is a monocyclic saturated or unsaturated carbocyclic or heterocyclic ring having 1 or 2 N and/or O atoms which is monosubstituted or disubstituted by =O, =S, $=NR^1$, $=NOR^1$, =N-CN, $=N-NO_2$, $=NCOR^1$, $=NCOOR^1$ or $=NOCOR^1$,

R^1 is H or A,

A is unbranched or branched alkyl having 1-10 carbon atoms, and 1-7 H atoms may be replaced by F,

and pharmaceutically usable derivatives, solvates and stereoisomers thereof, including mixtures thereof in all ratios.

29. Compounds of the formula I according to one or more of Claims 1-28, in which

D is phenyl, pyrrolyl, furyl, thiophenyl, pyridinyl, pyrimidinyl, pyridazinyl, pyrazinyl, pyrazolyl, imidazolyl, oxazolyl, isoxazolyl, thiazolyl, isothiazolyl or triazinyl, each of which is monosubstituted or polysubstituted by Hal,

X and X' are H,

W is $-[C(R^2)_2]_nCONR^2[C(R^2)_2]_n-$, $-[C(R^2)_2]_nNR^2CO[C(R^2)_2]_n-$, $-[C(R^2)_2]_nO[C(R^2)_2]_n-$, $-[C(R^2)_2]_nNR^2[C(R^2)_2]_n-$, $-[C(R^2)_2]_nO[C(R^2)_2]_nCONR^2[C(R^2)_2]_n-$, $-[C(R^2)_2]_nNR^2[C(R^2)_2]_nCONR^2[C(R^2)_2]_n-$, $-[C(R^2)_2]_nNR^2COO[C(R^2)_2]_n-$ or $-[C(R^2)_2]_nS(O)_m[C(R^2)_2]_nCONR^2[C(R^2)_2]_n-$,

R^2 is H, A or $-[C(R^1)_2]_n-Ar'$,

Ar' is phenyl,

Y is phenylene or piperidinediyl, each of which is unsubstituted or monosubstituted or disubstituted by A, Br, Cl or F,

T is 2-oxopiperidin-1-yl, 2-oxopyrrolidin-1-yl, 2-oxo-1*H*-pyridin-1-yl, 3-oxomorpholin-4-yl, 4-oxo-1*H*-pyridin-1-yl, 2,6-dioxopiperidin-1-yl, 2-oxopiperazin-1-yl, 2,6-dioxopiperazin-1-yl, 2-oxopyrazin-1-yl, 2,5-dioxo-pyrrolidin-1-yl, 2-oxo-1,3-oxazolidin-3-yl, 3-oxo-2*H*-pyridazin-2-yl, 2-caprolactam-1-yl (= 2-oxoazepan-1-yl), 2-hydroxy-6-oxopiperazin-1-yl, 2-azabicyclo[2.2.2]octan-3-on-2-yl, 2-methoxy-6-oxopiperazin-1-yl, 5,6-dihydro-1*H*-pyrimidin-2-oxo-1-yl, 2-iminopiperidin-1-yl or 2-iminopyrrolidin-1-yl,

R^1 is H or A,

A is unbranched or branched alkyl having 1-10 carbon atoms, and 1-7 H atoms may be replaced by F,

and pharmaceutically usable derivatives, solvates and stereoisomers thereof, including mixtures thereof in all ratios.

30. Compounds according to Claim 1 selected from the group consisting of

2-[2-(5-chlorothiophen-2-yl)-1*H*-benzimidazol-5-yl]-*N*-[4-(3-oxomorpholin-4-yl)phenyl]acetamide,

2-[2-(5-chlorothiophen-2-yl)-1*H*-benzimidazol-5-yl]-*N*-[3-methyl-4-(3-oxomorpholin-4-yl)phenyl]acetamide,

2-[2-(5-chlorothiophen-2-yl)-1*H*-benzimidazol-5-yl]-*N*-[4-(2-oxopyridin-1-yl)phenyl]acetamide,

2-[2-(5-chlorothiophen-2-yl)-1*H*-benzimidazol-5-yl]-*N*-[4-(2-oxopyrrolidin-1-yl)phenyl]acetamide,

2-[2-(5-chlorothiophen-2-yl)-1*H*-benzimidazol-5-yl]-*N*-[3-methyl-4-(2-oxopyrrolidin-1-yl)phenyl]acetamide,

2-[2-(5-chlorothiophen-2-yl)-1*H*-benzimidazol-5-yl]-*N*-[4-(2-oxopyrazin-1-yl)phenyl]acetamide,

2-[2-(5-chlorothiophen-2-yl)-1*H*-benzimidazol-5-yl]-*N*-[4-(2-iminopyrrolidin-1-yl)phenyl]acetamide,

2-[2-(5-chlorothiophen-2-yl)-1*H*-benzimidazol-5-yl]-*N*-[4-(2-iminopiperidin-1-yl)phenyl]acetamide,

2-(5-chlorothiophen-2-yl)-5-[4-(2-oxopiperidin-1-yl)phenoxymethyl]-1*H*-benzimidazole,

2-(5-chlorothiophen-2-yl)-5-[4-(2-oxopiperidin-1-yl)phenoxy]-1*H*-benzimidazole,

2-(5-chlorothiophen-2-yl)-5-[4-(2-oxopiperidin-1-yl)phenylamino]-1*H*-benzimidazole,

2-[2-(5-chlorothiophen-2-yl)-1*H*-benzimidazol-5-yl]-*N*-[4-(3-oxomorpholin-4-yl)phenyl]valeramide,

2-[2-(5-chlorothiophen-2-yl)-1*H*-benzimidazol-5-yl]-*N*-[4-(3-oxomorpholin-4-yl)phenyl]-3-phenylpropionamide,

2-[2-(4-chlorophenyl)-1*H*-benzimidazol-5-yl]-*N*-[4-(3-oxomorpholin-4-yl)phenyl]acetamide,

2-[2-(4-chlorophenyl)-1*H*-benzimidazol-5-yl]-*N*-[3-methyl-4-(3-oxomorpholin-4-yl)phenyl]acetamide,

2-[2-(5-chloropyridin-2-yl)-1*H*-benzimidazol-5-yl]-*N*-[4-(3-oxomorpholin-4-yl)phenyl]acetamide,

2-[2-(5-chloropyridin-2-yl)-1*H*-benzimidazol-5-yl]-*N*-[3-methyl-4-(3-oxomorpholin-4-yl)phenyl]acetamide,

2-[2-(5-chlorothiophen-2-yl)-1*H*-benzimidazol-5-yl]-*N*-[4-(2-oxopiperidin-1-yl)benzyl]acetamide,

2-[2-(5-chlorothiophen-2-yl)-1*H*-benzimidazol-5-yloxy]-*N*-[4-(3-oxomorpholin-4-yl)phenyl]acetamide,

2-[2-(5-chlorothiophen-2-yl)-1*H*-benzimidazol-5-yloxy]-*N*-[4-(3-oxomorpholin-4-yl)phenyl]valeramide,

2-[2-(5-chlorothiophen-2-yl)-1*H*-benzimidazol-5-yloxy]-*N*-[4-(2-oxopiperidin-1-yl)benzyl]acetamide,

2-[2-(5-chlorothiophen-2-yl)-1*H*-benzimidazol-5-yl]-*N*-[4-(3-oxomorpholin-4-yl)benzyl]acetamide,

1-[2-(5-chlorothiophen-2-yl)-1*H*-benzimidazol-5-yl]-*N*-[4-(2-oxopiperidin-1-yl)benzyl]formamide,

N-[2-(5-chlorothiophen-2-yl)-1*H*-benzimidazol-5-yl]-4-(2-oxopiperidin-1-yl)benzamide,

N-[2-(5-chlorothiophen-2-yl)-1*H*-benzimidazol-5-ylmethyl]-*N*-[4-(2-oxopiperidin-1-yl)benzyl]amine,

2-[2-(5-chlorothiophen-2-yl)-1*H*-benzimidazol-5-ylamino]-*N*-[4-(3-oxomorpholin-4-yl)phenyl]acetamide,

2-[2-(5-chlorothiophen-2-yl)-1*H*-benzimidazol-5-yl]-*N*-(2'-methylsulfonylbiphenyl-4-yl)acetamide,

2-[2-(5-chlorothiophen-2-yl)-1H-benzimidazol-5-yl]-*N*-(3,4,5,6-tetrahydro-2*H*-[1,4']bipyridinyl-4-ylmethyl)acetamide,

2-[2-(5-chlorothiophen-2-yl)-1*H*-benzimidazole-5-sulfonyl]-*N*-[3-methyl-4-(3-oxomorpholin-4-yl)phenyl]acetamide,

2-[2-(5-chlorothiophen-2-yl)-1*H*-benzimidazole-5-sulfonyl]-*N*-[4-(3-oxomorpholin-4-yl)phenyl]acetamide,

2-[2-(5-chlorothiophen-2-yl)-1*H*-benzimidazole-5-sulfonyl]-*N*-[4-(2-oxopyridin-1-yl)phenyl]acetamide,

2-[2-(5-chlorothiophen-2-yl)-1*H*-benzimidazole-5-sulfonyl]-*N*-[4-(2-oxopiperidin-1-yl)benzyl]acetamide,

3-[2-(5-chlorothiophen-2-yl)-1*H*-benzimidazol-5-yl]-*N*-[4-(3-oxomorpholin-4-yl)phenyl]propionamide,

3-[2-(5-chlorothiophen-2-yl)-1*H*-benzimidazol-5-yl]-*N*-[3-methyl-4-(3-oxomorpholin-4-yl)phenyl]propionamide,

2-[2-(5-chlorothiophen-2-yl)-1*H*-benzimidazol-5-yl]-*N*-[4-(2-oxopiperidin-1-yl)phenyl]acetamide,

2-(5-chlorothiophen-2-yl)-1*H*-benzimidazole-5-carboxamide-*N*-[3-methyl-4-(3-oxomorpholin-4-yl)phenyl]amide,

2-(5-chlorothiophen-2-yl)-1*H*-benzimidazole-5-carboxamide-*N*-[4-(3-oxomorpholin-4-yl)phenyl]amide,

2-[2-(5-chlorothiophen-2-yl)-1*H*-benzimidazol-5-yl]-*N*-[4-(2-iminopiperidin-1-yl)phenyl]valeramide,

2-[2-(5-chlorothiophen-2-yl)-1*H*-benzimidazol-5-yloxy]-*N*-[4-(2-oxopiperidin-1-yl)benzyl]acetamide,

2-[2-(5-chlorothiophen-2-yl)-1*H*-benzimidazol-5-yloxy]-*N*-[4-(2-oxo-2*H*-pyrazin-1-yl)phenyl]acetamide,

N-[2-(5-chlorothiophen-2-yl)-1*H*-benzimidazol-5-ylmethyl]-4-(2-oxopiperidin-1-yl)benzamide,

2-[2-(5-bromothiophen-2-yl)-1*H*-benzimidazol-5-yl]-*N*-[4-(3-oxomorpholin-4-yl)phenyl]acetamide,

2-[2-(5-bromothiophen-2-yl)-1*H*-benzimidazol-5-yl]-*N*-[4-(2-oxopiperidin-1-yl)phenyl]acetamide,

2-[2-(5-bromothiophen-2-yl)-1*H*-benzimidazol-5-yl]-*N*-[4-(2-oxopyridin-1-yl)phenyl]acetamide,

2-[2-(5-bromothiophen-2-yl)-1*H*-benzimidazol-5-yl]-*N*-[4-(2-oxopiperidin-1-yl)benzyl]acetamide,

2-[2-(5-bromothiophen-2-yl)-1H-benzimidazol-5-yl]-*N*-(3,4,5,6-tetrahydro-2*H*-[1,4']bipyridinyl-4-ylmethyl)acetamide,

2-[2-(5-bromothiophen-2-yl)-1*H*-benzimidazol-5-yl]-*N*-[3-methyl-4-(3-oxomorpholin-4-yl)phenyl]acetamide,

2-[2-(5-chlorothiophen-2-yl)-1*H*-benzimidazol-5-yloxy]-*N*-[4-(2-iminopiperidin-1-yl)phenyl]acetamide,

2-[2-(5-chlorothiophen-2-yl)-1*H*-benzimidazol-5-yloxy]-*N*-[3-methyl-4-(3-oxomorpholin-4-yl)phenyl]acetamide,

2-[2-(5-chlorothiophen-2-yl)-1*H*-benzimidazol-5-yloxy]-*N*-[3-fluoro-4-(3-oxomorpholin-4-yl)phenyl]valeramide,

N-[2-(5-chlorothiophen-2-yl)-1*H*-benzimidazol-5-ylmethyl]-2-[4-(3-oxomorpholin-4-yl)phenyl]acetamide,

N-[2-(5-chlorothiophen-2-yl)-1*H*-benzimidazol-5-yl]-2-[4-(3-oxomorpholin-4-yl)phenyl]acetamide,

and pharmaceutically usable derivatives, solvates and stereoisomers thereof, including mixtures thereof in all ratios.

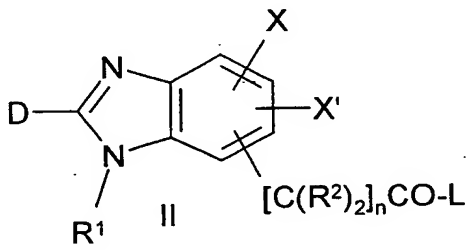
31. Process for the preparation of compounds of the formula I according to Claims 1-30 and pharmaceutically usable derivatives, solvates and stereoisomers thereof, characterised in that

a) for the preparation of a compound of the formula I

in which

W is $-[C(R^2)_2]_nCONR^2[C(R^2)_2]_n-$,

a compound of the formula II



II

in which

L is Cl, Br, I or a free or reactively functionally modified OH group,

and R^1, R^2, D, X, X' and n are as defined in Claim 1,

with the proviso that any further OH and/or amino group present is protected,

is reacted with a compound of the formula III

$$Z'\text{-}Y\text{-}T \qquad III$$

in which

Z' is $NHR^2[C(R^2)_2]_n$-,

and R^2, Y, T and n are as defined in Claim 1,

and any protecting group is subsequently removed,

b) and/or in that a radical T in a compound of the formula I is converted into another radical T

by, for example,

i) converting a sulfanyl compound into an imino compound,

ii) removing an amino-protecting group,

and/or

a base or acid of the formula I is converted into one of its salts.

32. Compounds of the formula I according to one or more of Claims 1 to 30 as inhibitors of coagulation factor Xa.

33. Compounds of the formula I according to one or more of Claims 1 to 30 as inhibitors of coagulation factor VIIa.

34. Medicament comprising at least one compound of the formula I according to one or more of Claims 1 to 30 and/or pharmaceutically usable derivatives, solvates and stereoisomers thereof, including

mixtures thereof in all ratios, and optionally excipients and/or adjuvants.

35. Medicament comprising at least one compound of the formula I according to one or more of Claims 1 to 30 and/or pharmaceutically usable derivatives, solvates and stereoisomers thereof, including mixtures thereof in all ratios, and at least one further medicament active ingredient.

36. Use of compounds according to one or more of Claims 1 to 30 and/or physiologically acceptable salts and solvates thereof for the preparation of a medicament for the treatment of thromboses, myocardial infarction, arteriosclerosis, inflammation, apoplexia, angina pectoris, restenosis after angioplasty, claudicatio intermittens, migraine, tumours, tumour diseases and/or tumour metastases.

37 Set (kit) consisting of separate packs of

(a) an effective amount of a compound of the formula I according to one or more of claims 1 to 30 and/or pharmaceutically usable derivatives, solvates and stereoisomers thereof, including mixtures thereof in all ratios,

and

(b) an effective amount of a further medicament active ingredient.

38. Use of compounds of the formula I according to one or more of Claims 1 to 25 and/or pharmaceutically usable derivatives, solvates and stereoisomers thereof, including mixtures thereof in all ratios, for the preparation of a medicament for the treatment of thromboses, myocardial infarction, arteriosclerosis, inflammation, apoplexia,

angina pectoris, restenosis after angioplasty, claudicatio intermittens, migraine, tumours, tumour diseases and/or tumour metastases, in combination with at least one further medicament active ingredient.